

Amendments to the Claims:

1. (Withdrawn) An elongated shaped particle comprising two protrusions each protrusion extending from and attached to a central position, wherein the central position is aligned along the longitudinal axis of the particle, the cross-section of the particle occupying the space encompassed by the outer edges of six circles around a central circle, each of the six circles touching two neighboring circles while two alternating circles are equidistant to the central circle and may be attached to the central circle and the two circles adjacent to the two alternating circles, but not the common circle touching the central circle, minus the space occupied by the four remaining outer circles and including four remaining interstitial regions, the elongated shaped particle further comprising one to four additional protrusions, each attached to an existing endstanding protrusion as defined above, the additional protrusion being defined in the same way as above, the existing endstanding protrusion becoming the new central circle, and the original central circle becoming the other protrusion.

2. (Withdrawn) The elongated shaped particle of claim 1, having a cross-section in which the two remaining alternating circles and, the additional protrusions have diameters in the range between 0.74 and 1.3 times the diameter of the central circle.

3. (Withdrawn) The elongated shaped particle of claim-1, in which the angle between the two lines connecting the centers of the two remaining circles and the central circle is between  $90^{\circ}$  and  $180^{\circ}$  or between  $180^{\circ}$  and  $270^{\circ}$ .

4. (Withdrawn) The elongated shaped particle of claim 1 having a cross-section in which the two remaining alternating circles and the additional protrusions have the same diameter as the central circle as defined in claim 1, in which the two alternating circles and the additional protrusions are attached to the central circle.

5. (Withdrawn) The elongated shaped particle of claim-1 having an L/D ratio (mm/mm), wherein D is the diameter of the central circle of between 1 and 25.

6. (Currently Amended) A shaped catalyst or catalyst precursor containing a catalytically active component or a precursor ~~thereof~~ thereof, supported on a carrier, which carrier is an elongated shaped particle comprising two protrusions; each protrusion extending from and attached to a central position, wherein the central position is aligned along the longitudinal axis of the particle, the cross-section of the particle occupying the space encompassed by the outer edges of six circles around a central circle, each of the six circles touching two neighboring circles while two alternating circles are equidistant to the central circle and may be attached to the central circle and the two circles adjacent to the two alternating circles, but not the common circle touching the central circle, minus the space occupied by the four remaining outer circles and including four remaining interstitial regions, the elongated shaped particle further comprising one to four additional protrusions, each attached to an existing endstanding protrusion as defined above, the additional protrusion being defined in the same way as above, the existing endstanding protrusion becoming the new central circle, and the original central circle becoming the other protrusion.

7. (Currently Amended) The shaped catalyst or catalyst precursor of claim 6 wherein the component is selected from the group consisting of elements of Group VIII of the Periodic Table of the Elements.

8. (Previously Presented) The shaped catalyst or catalyst precursor of claim 7 wherein the carrier is a refractory oxide.

9. (Currently Amended) The shaped catalyst or catalyst precursor of claim 7 containing an element or compound selected from the group consisting of Group IIA, IIIB, IVB, VB, VIB, VIIB ~~or~~ and VIII of the Periodic Table of the Elements.

10. (Previously Presented) The shaped catalyst or catalyst precursor of claim 6 wherein the catalyst has been made by extrusion.

11. (Withdrawn) A process for the preparation of a carrier comprising two protrusions; each protrusion extending from and attached to a central position, wherein the central position is aligned along the longitudinal axis of the particle, the cross-section of the particle occupying the space encompassed by the outer edges of six circles around a central circle, each of the six circles touching two neighboring circles while two alternating circles are equidistant to the central circle and may be attached to the central circle and the two circles adjacent to the two alternating circles, but not the common circle touching the central circle, minus the space occupied by the four remaining outer circles and including four remaining interstitial regions, the elongated shaped particle further comprising one to four additional protrusions, each attached to an existing endstanding protrusion as defined above, the additional protrusion being defined in the same way as above, the existing endstanding protrusion becoming the new central circle, and the original central circle becoming the other protrusion, the process comprising pressing, extruding or otherwise forcing a granular or powdered catalyst or catalyst precursor material into various shapes under certain conditions, which will ensure that the particle retains the resulting shape, both during reaction as well as regeneration.

12. (Withdrawn) A die-plate comprising one or more orifices in the shape of a cross-section comprising a space encompassed by the outer edges of six circles around a central circle, each of the six circles touching two neighboring circles while two alternating circles are equidistant to the central circle and may be attached to the central circle and the two circles adjacent to the two alternating circles, but not the common circle touching the central circle, minus the space occupied by the four remaining outer circles and including four remaining interstitial regions, the elongated shaped particle further comprising one to four additional protrusions, each attached to an existing endstanding protrusion as defined above, the additional protrusion being defined in the same way as above, the existing endstanding protrusion becoming the new central circle, and the original central circle becoming the other protrusion.

13. (Withdrawn) A process for the preparation of hydrocarbons by contacting a mixture of carbon monoxide and hydrogen with a catalyst comprising a shaped catalyst or catalyst precursor containing a catalytically active component or a precursor therefore, supported on a carrier,

which carrier is an elongated shaped particle comprising two protrusions; each protrusion extending from and attached to a central position, wherein the central position is aligned along the longitudinal axis of the particle, the cross-section of the particle occupying the space encompassed by the outer edges of six circles around a central circle, each of the six circles touching two neighboring circles while two alternating circles are equidistant to the central circle and may be attached to the central circle and the two circles adjacent to the two alternating circles, but not the common circle touching the central circle, minus the space occupied by the four remaining outer circles and including four remaining interstitial regions, the elongated shaped particle further comprising one to four additional protrusions, each attached to an existing endstanding protrusion as defined above, the additional protrusion being defined in the same way as above, the existing endstanding protrusion becoming the new central circle, and the original central circle becoming the other protrusion, the catalyst being optionally activated.

14. (Withdrawn) The process of claim 13 further comprising hydrogenating, hydroisomerizing and/or hydrocracking the hydrocarbons to produce fuels and base oils.

15. (Withdrawn) The shaped particle of claim 1 wherein the particle has been made by extrusion.

16. (Withdrawn) A process for the preparation of a catalyst or catalyst precursor comprising a shaped catalyst or catalyst precursor containing a catalytically active component or a precursor therefore, supported on a carrier, which carrier is an elongated shaped particle comprising two protrusions; each protrusion extending from and attached to a central position, wherein the central position is aligned along the longitudinal axis of the particle, the cross-section of the particle occupying the space encompassed by the outer edges of six circles around a central circle, each of the six circles touching two neighboring circles while two alternating circles are equidistant to the central circle and may be attached to the central circle and the two circles adjacent to the two alternating circles, but not the common circle touching the central circle, minus the space occupied by the four remaining outer circles and including four remaining interstitial regions, the elongated shaped particle further comprising one to four additional

protrusions, each attached to an existing endstanding protrusion as defined above, the additional protrusion being defined in the same way as above, the existing endstanding protrusion becoming the new central circle, and the original central circle becoming the other protrusion, the process comprising pressing, extruding or otherwise forcing a granular or powdered catalyst or catalyst precursor material into various shapes under certain conditions, which will ensure that the particle retains the resulting shape, both during reaction as well as regeneration.

17. (Previously Presented) The shaped catalyst of claim 6 wherein the additional protrusions have diameters in the range between 0.87 and 1.15 times the diameter of the central circle.

18. (Previously Presented) The shaped catalyst of claim 6 wherein the component is cobalt.

19. (Previously Presented) The shaped catalyst of claim 6 wherein the carrier is selected from the group consisting of silica, alumina and titania.

20. (Previously Presented) The shaped catalyst of claim 6 wherein the component is cobalt and the carrier is titania.